

AMENDMENTS

In the Claims

1–12. (Cancelled)

13. **(Currently Amended)** A method for propagating information in a network comprising:

automatically assigning an index number to an interface;

automatically transmitting said index number using said interface, wherein

said automatically transmitting said index number using said interface uses a packet routing protocol; and

automatically transmitting said index number using at least one additional interface, wherein

said automatically transmitting said index number using said at least one additional interface uses said packet routing protocol,

said interface and said one additional interface are interfaces among a plurality of interfaces [[in]] of a circuit switch,

said interface is configured to be coupled to a link,

said circuit switch is configured to store a table, and

said table comprises

an entry indicating a function of said link, and

an entry indicating a predetermined number of contiguous frames that may be transmitted over said link.

14. **(Currently Amended)** The method of claim 13 further comprising ~~the act of~~ automatically transmitting said index number on all enabled interfaces [[in]] of said circuit switch.

15. (Original) The method of claim 13 wherein said interface and said one additional interface conform to a protocol selected from a group consisting of Synchronous Optical Network (SONET) and Synchronous Digital Hierarchy (SDH).

16. (Previously Presented) The method of claim 13 further comprising:
storing said index number in said table, wherein
at least another network element in said network is configured to store said index
number in another table.

17. (Currently Amended) A network comprising:

a first router;

a first circuit switch **having comprising** a first interface, **wherein**

said first circuit switch is communicatively coupled to said first router,

said first circuit switch comprises a first plurality of memory locations, and

[[the]] said first interface having assigned thereto a first identifier;

a second router;

a second circuit switch **having comprising** a second interface, **wherein**

said second circuit switch is communicatively coupled to said second router,

said second circuit switch comprises a second plurality of memory locations,

[[the]] said second interface having assigned thereto a second identifier~~[[;]]~~ ,

[[a]] said first plurality of memory locations ~~in said first circuit switch~~

containing store a first table, **[[the]]**

said first table **including comprises** each of said first identifier and said second

identifier~~[[;]]~~ ,

[[a]] said second plurality of memory locations ~~in said second circuit switch~~

containing store a second table, **and**

said second table **including comprises** each of said first identifier and said second

identifier, **and**

said first circuit switch and said second circuit switch are configured to

communicate using a packet routing protocol; and

a link coupling said first interface to said second interface, wherein

said first table and said second table each comprise

an entry indicating a function of said link, and

an entry indicating a predetermined number of contiguous frames that may
be transmitted over said link.

18. (Previously Presented) The network of claim 17 wherein said link comprises a fiber optic cable.

19. (Original) The network of claim 17 wherein said first circuit switch and said second circuit switch use a protocol selected from a group consisting of Synchronous Optical Network (SONET) and Synchronous Digital Hierarchy (SDH).

20-26. (Cancelled)

27. **(Currently Amended)** An article of manufacture comprising:
a computer readable storage medium comprising a computer readable program code for propagating information in a network, said computer readable program code in said article of manufacture further comprising
computer readable program code for automatically assigning an index number to an interface;
computer readable program code for automatically transmitting said index number on said interface, wherein
said computer readable program code for automatically transmitting said index number on said interface is configured to use a packet routing protocol; and
computer readable program code for automatically transmitting said index number on at least one additional interface, wherein
said computer readable program code for automatically transmitting said index number on said at least one additional interface is configured to use said packet routing protocol,
said interface and said one additional interface are interfaces among a plurality of interfaces [[in]] of a circuit switch,
said interface is configured to be coupled to a link,
said circuit switch is configured to store a table, and
said table comprises
an entry indicating a function of said link, and

an entry indicating a predetermined number of contiguous frames that may be transmitted over said link.

28. (Previously Presented) The method of claim 13 wherein said at least one additional interface is configured to be coupled to another link, said circuit switch is configured to store another table, and said another table comprises

- another entry indicating a function of said link, and
- another entry indicating a predetermined number of contiguous frames that may be transmitted over said another link.

29. (Previously Presented) The article of manufacture of claim 27 wherein said at least one additional interface is configured to be coupled to another link, said circuit switch is configured to store another table, and said another table comprises

- another entry indicating a function of said link, and
- another entry indicating a predetermined number of contiguous frames that may be transmitted over said another link.

30. (New) The method of claim 13, wherein said packet routing protocol is one of an Open Shortest Path First (OSPF) protocol and a Routing Information Protocol (RIP).

31. (New) The method of claim 13, wherein said link is configured to couple said interface to another interface in another circuit switch.

32. (New) The method of claim 13, wherein said network comprises a plurality of routers and a plurality of circuit switches, said circuit switches comprise said circuit switch, and the method further comprises:

- transmitting said index number from a router of said routers in accordance with said packet routing protocol, wherein

said transmitting comprises said automatically transmitting said index number using said interface.

33. **(New)** The method of claim 32, further comprising:

storing said index number in said table, wherein

said transmitting transmits a packet from said router to another router of said routers,

a network element in said network comprises said circuit switch and said router, another network element in said network comprises another circuit switch of said circuit switches and said another router, and

said another network element is configured to store said index number in another table.

34. **(New)** The method of claim 33, further comprising:

segmenting said packet into a plurality of units at said network element,

forming a plurality of frames at said network element, wherein

each frame comprises at least one of said units;

reassembling said plurality of units into said packet at said another network element; and

storing said index number in said another table.

35. **(New)** The method of claim 34, wherein

said link is coupled between said network element and said another network element,

said table and said another table each comprise information, and

said information indicates a predetermined number of contiguous frames that may be transmitted over said link.

36. **(New)** The article of manufacture of claim 37, wherein said network comprises a plurality of routers and a plurality of circuit switches, said circuit switches comprise said circuit switch, and said computer readable program code in said article of manufacture further comprises:

computer readable program code for transmitting said index number from a router of said routers in accordance with said packet routing protocol, wherein

said computer readable program code for transmitting comprises said computer readable program code for automatically transmitting said index number using said interface.

37. **(New)** The article of manufacture of claim 36, wherein said computer readable program code in said article of manufacture further comprises:

computer readable program code for storing said index number in said table, wherein said computer readable program code for transmitting transmits a packet from said router to another router of said routers, a network element in said network comprises said circuit switch and said router, another network element in said network comprises another circuit switch of said circuit switches and said another router, and said another network element is configured to store said index number in another table.

38. **(New)** The method of claim 37, wherein said computer readable program code in said article of manufacture further comprises:

computer readable program code for segmenting said packet into a plurality of units at said network element, computer readable program code for forming a plurality of frames at said network element, wherein each frame comprises at least one of said units; computer readable program code for reassembling said plurality of units into said packet at said another network element; and computer readable program code for storing said index number in said another table.

39. **(New)** The article of manufacture of claim 38, wherein said link is coupled between said network element and said another network element, said table and said another table each comprise information, and said information indicates a predetermined number of contiguous frames that may be transmitted over said link.